Analytical study on green HR practices- need a paradigm shift

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Carbon discharge of the employees should be analyzed and watched by the HR manager of the organization. In this competitive and advanced business world, Green running is very important. But the implementation of green management and green management principles in the working environment is a difficult task to HR people. Reducing the use of carbon emitted sources should be taught by the HR employees. It's the duty of HR to encourage the employees to take double sided photocopies, proper shut down of systems, switching off fan, AC and lights when not in use, etc. This paper is to determine the HR policies in the working atmosphere to manage and encourage environment friendly activities of employees inside the organization.
KEYWORDS: Green management, HR practices, Green HR, Green HRM, Information Technology

1. INTRODUCTION

Information Technology field in India has a tremendous growth over the last decade. Indian IT industry is classified into three namely software industry, information technology enabled services (ITES) and business process outsourcing (BPO) industry (Arora et al., 2001). India leads the way in software development. Also India pay the way for IT-enabled services.

In the modern world where the competition is hard among different production units, human resource is considered the most important and brave able asset of an organization (Murari Krishna and Bhandari Meenu, 2011). An organization, may be small or large, formal or informal, is composed of heterogeneous human resources who differ from each other in their skill, knowledge and psychology. Thus, human resource is the finest asset of any type of the organization (Arulrajah Anton, 2015). Earlier organisations employed hands and obviously, hands have limited productive potential. (Mandip, 2012) In global and knowledge-based economy, business has become more competitive and tough due to rapid changes in demand, market structure, market imperfections, technologies, national and international policies etc. such changes can be accommodated only by competent, efficient and skilled human resource

Human Resource Practices: Human Resources are the people who work in an organization. Human resources are considered as the valuable assets of any organization. Various activities such as manpower planning, recruitment and selection, training and growth, compensation package, decision making, industrial relations, ethics and supervisory relationship in the software industry (Chapke, 2011).

Human Resource Management deals with finding the right people, placing them on the correct job, at the accurate time, training and development for better performance, providing a growth-oriented career path and maintaining their motivation and satisfaction through appropriate and timely rewards (Dessler Gary, 2000).
The personal needs are satisfied when rewards from the organisations such as compensation, promotion, appreciation and growth meet their expectations (Sathyapriya, 2014). When stress occurs in the process of communication between a person and the work environment, it pressurizes the individual's psychological and physiological well-being. Physical sickness and psychological chaos increase when pressure at work increases.

Green Human Resource Practices: Green Human Resource is nothing but to utilize the E-Machines as a replacement for of Mannual Machines (Suhaimi Sudin, 2011). It directs in reducing the stationary Garbage (Notebooks, Pen, marker etc.) which helps in maintaining the stable economy as well the Green Environment. For students, as an alternative of taking classes on the White / Black Board, Lecturers can handle the classes on Projectors/ can use Soft copies as a substitute of Hard Copies and in Corporates, Can sustain the Soft Copies instead of Hard Copies and Take the back up of each important value (Cherian Jacob and Jacob Jolly, 2012).

Green HRM is related to create awareness among the people within the organization so that the employees can understand what is environment, why we should be careful to protect it and how we can ensure this (Florida R., and Davison, D., 2001). Policies and procedures should be make in a way which supports your commitment to the environment. (Prasad Sharan Ravi, 2011) Make your office paperless, print less, reduce energy consumption and save energy, make an effective uses of water, reduce carbon footprint. The HR needs to ensure that all the policies are environment friendly, connect their performance to this policies.

Statement of the problem: In order to make the working environment green, the employees should be conscious about the environment and they should be properly motivated and their suggestions should be agreed. Green management in the organization needs a good grade of managerial expertise to build up innovation and creation based environmental plans (Aravamudhan, 2012). But still, there is certain space occurs in-between human resource management and the various aspects of environmental management that is the green environment. Hence there is a need for this study to analyze the green environmental factors into the field of HRM.

Objective: This study aims to analyze green HR practices in organizations with special focus to IT industry in India.

2. METHODOLOGY

Research is an art of scientific investigation. Research helps us to learn the problem first before answering it. It helps us to analyze the various factors related to the problem. By using statistical tools and technique, the difficult and obstruct problems can be solved. This will helps to find out any type of problem with suitable solution. In this paper the researcher used factor analysis to identify the most significant factors. Both primary and secondary data are used in this study. In this research, the researcher followed descriptive type research.

3. RESULTS AND DISCUSSION

Factor Analysis for Green HR Practices: Factor analysis helps to reduce large number of factors into minimum number of factors by considering their inter-relation within each other. The first step towards the factor analysis is to fulfill the basic assumptions of correlation matrix. Kaiser-Meyer-Olkin test of sampling adequacy and Bartlett's test of factorability are done to measure the sampling efficiency. The calculated values are given below.

Table.1. KMO and Bartlett's Test for Green HR Practices

Kaiser-Meyer-Olkin measure of Sampling Adequacy		0.879
Bartlett's Test of Sphericity	Chi-Square	10841.50
	Degrees of freedom	435
	Significance	0.000

Source: Computed Data

From the above table, the sample adequacy value 0.879 indicates the correlation between the variables. It also shows that there is a possibility of doing factor analysis because the variables in pair are explained by other variables.

The Bartlett's test of sphericity chi-square point outs the population correlation matrix. It is an intensity matrix. The test of statistics for sphericity is based on X^2 test, which is significant. The value is 10841.50. KMO and Bartlett's test indicates that factor analysis can be done to reduce limited number of factors. Hence the analysis of green HR practices are done through rotated factor matrix. The results gave six factors which are mainly focussing on green environment. The results are shown below in the table 2.

Table.2. Rotated Factor Matrix for Green HR Practices by Principle Component Analysis method

Variables	F1	F2	F3	F4	F5	F6
Using bicycles for transportation	0.821	0.228	0.011	0.193	0.089	0.065
Recognizing employees for green innovations	0.797	0.393	0.069	0.231	0.030	0.065
Reducing water usage by having water-conserving plumbing fixtures	0.776	0.393	0.034	0.202	0.134	0.111
Management provides incentives for employees to buy hybrid cars	0.764	0.264	0.029	0.278	0.123	0.041
Buying renewed goods	0.751	0.296	0.216	0.067	0.023	0.036
Social responsibility programs like planting trees, etc.	0.725	0.332	0.238	0.232	0.095	0.147
Green Manufacturing & Disposal of Staff ID card	0.691	0.358	0.036	0.073	0.303	0.252
Place green live plants for the quality of indoor air	0.577	0.055	0.451	0.110	0.353	0.223
Promoting walking, biking, taking public transit	0.509	0.240	0.305	0.494	0.003	0.007
Environmentally responsible efforts are included in the organization's newsletters/other publications	0.270	0.817	0.108	0.275	0.113	0.090
Green newsletter	0.299	0.796	0.008	0.168	0.018	0.074
Environmental liability in organization's goal	0.310	0.792	0.167	0.232	0.041	0.115
Organization has green teams to educate, inspire and empower employees	0.278	0.760	0.071	0.043	0.464	0.060
Training on green practices	0.346	0.718	0.059	0.149	0.278	0.033
Environmental commitment in the organization's mission	0.429	0.706	0.129	0.227	0.066	0.183
Organization is conducting green hr campaign programmes for employees to provide awareness about green hr issues	0.214	0.702	0.201	0.032	0.495	0.042
Management encourages employees to work more environmental friendly	0.401	0.624	0.234	0.150	0.055	0.359
Online resume submission	0.008	0.035	0.854	0.132	0.090	0.024
Online payroll and clock-ins	0.042	0.012	0.812	0.079	0.233	0.043
Non-smoking policy for indoor air quality	0.042	0.101	0.791	0.051	0.163	0.086
Cleaning AC units regularly to prevent bacteria	0.248	0.051	0.675	0.117	0.220	0.284
Saving electricity	0.432	0.134	0.654	0.109	0.030	0.044

Storing paperwork in electronic mode (E-copy, email, etc.)	0.222	0.367	0.076	0.742	0.141	0.161
Encourage employees to take double sided photocopies	0.395	0.459	0.044	0.633	0.085	0.007
Remanufactured ink and toner cartridges were used	0.358	0.287	0.092	0.552	0.420	0.242
Automatic shutoff is used for equipment	0.215	0.230	0.252	0.541	0.444	0.234
Using Energy Star rated equipment (AC, copier, fax machine, computer, laptop, etc.)	0.135	0.133	0.405	0.177	0.670	0.137
Using high energy efficient lighting systems and equipment (Compact fluorescents)	0.076	0.146	0.394	0.144	0.619	0.234
Management offers post-consumer recyclable products (Papers, plastics, etc.)	0.138	0.166	0.226	0.178	0.216	0.854
Give a small plant as an incentive to the employees every year	0.087	0.140	0.151	0.159	0.189	0.799

Source: Primary Data

The table 2 exhibits the rotated factor loading for the twelve statements (variables) of green HR practices. It is clear from table that all the thirty statements have been extracted into six factors.

Table.3.Green HR Practices – Factor Wise Analysis

Sl. No	Factors	Eigen Value	Percentage of Variance	Cumulative Percentage of Variance
1.	Recognition and Incentives Factor	17.123	22.552	22.552
2.	Environmental and Training factor	4.091	19.601	42.152
3.	Online factor	2.386	11.607	53.759
4.	Encouragement factor	1.663	8.819	62.578
5.	Energy efficient factor	1.427	7.136	69.714
6.	Recyclable factor	1.320	6.006	75.770

Source:Computed Data

From the table it is clear that the various thirty factors are reduced into six factors depending upon the variance and Eigen values of the factors. The cumulative variance of all the factors is 75.770 percentages. The first factor has Eigen value 1.123 which indicates that it has high information than the other factors. Because the other factors have very less Eigen values.

Factor I (F1) – Recognition and Incentives Factor: Variables such as, 'Using bicycles for transportation' (0.821), 'Recognizing employees for green innovations' (0.797), 'Reducing water usage by having water-conserving plumbing fixtures' (0.776), 'Management provides incentives for employees to buy hybrid cars' (0.764), 'Buying renewed goods' (0.751), 'Social responsibility programs like planting trees, etc' (0.725), 'Green Manufacturing & Disposal of Staff ID card' (0.691), 'Place green live plants for the quality of indoor air' (0.577) and 'Promoting walking, biking, taking public transit' (0.509), had the highest significant positive loading and hence were included in the first factor. These variables were directly associated with the recognition and incentives. Hence, Factor I, was named as "Recognition and Incentives".

Factor II (F2) –Environmental and Training Factor: In the second factor (F2) variables such as 'Environmentally responsible efforts are take account in the organization's newsletters/other publications' (0.817), 'Green newsletter' (0.796), 'Environmental liability in organization's goal' (0.792), 'Organization has green teams to educate, inspire and empower employees' (0.760), 'Training on green practices' (0.718), 'Environmental commitment in the organization's mission' (0.706), 'Organization is conducting green hr campaign programmes for employees to provide awareness about green hr issues' (0.702) and 'Management encourages employees to work more environmental friendly' (0.624) were found to have the highest significant positive loading and hence they were grouped and included in Factor 2. Variables included in the second factor were closely associated with the environmental and training factor. So, the second factor was named as the 'Environmental and Training' factor.

Factor III (F3) –Online Factor: Variables such as, 'Online resume submission' (0.854), 'Online payroll and clock-ins' (0.812), 'Non-smoking policy for indoor air quality' (0.791), 'Cleaning AC units regularly to prevent bacteria' (0.675) and 'Saving electricity' (0.654) were found to have the highest significant positive loading and hence they were grouped and included in Factor 3. Hence, this factor III (F3) is called was named as the 'Online' factor.

IV (F4) – Encouragement Factor: 'Storing paperwork in electronic mode (E-copy, email, etc)' (0.742), 'Encourage employees to take double sided photocopies' (0.633), 'Remanufactured ink and toner cartridges were used' (0.552) and 'Automatic shutoff is used for equipments' (0.541)were the variables which were found to possess the highest

significant positive loading and they had been included in the Factor IV(F4). These variables were related to quality. Hence, the Factor IV (F4) had been named as the 'encouragement' factor.

Factor V (F5) –Energy Efficient Factor: Variables such as, 'Using Energy Star rated equipments (AC, copier, fax machine, computer, laptop, etc)' (0.670) and 'Using high energy efficient lighting systems and equipments (Compact fluorescents)' (0.619) were found to have the highest significant positive loading and hence they were grouped and included in Factor 5. Hence, this factor V (F5) is called was named as the 'Energy Efficient' factor.

V (F6) – Recyclable Factor: 'Management offers post-consumer recyclable products (Papers, plastics, etc)' (0.854) and 'Give a small plant as an encouragement to the employees every year' (0.799) were the variables which were found to possess the highest significant positive loading and they had been included in the Factor VI (F6). These variables were related to recyclable. Hence, the Factor VI (F6) had been named as the 'recyclable' factor.

4. SUGGESTIONS AND CONCLUSION

Green environment is an important concern in today's competitive and advance thinking corporate business. In order to make the working environment green, the employees should be conscious about the environment and they should be properly motivated and their suggestions should be agreed. Green management in the organization needs a good grade of managerial expertise to build up innovation and creation based environmental plans.

To make aware of employees regarding green environment and eco-friendly environment, it's better to conduct some research study along with learning attitudes. This research paper indicated the need of green HR and green environment in every organization. The implementation and usage of green environment plans will help the organization to fulfil its goals. And also there should be specific ideas to managers and higher authorities of organization.

This study will help the HR people in the industry and research scholars in the academic field to ensure about the practices of green HR.

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